

Waste Management and Radiation Control Board Meeting
Utah Department of Environmental Quality
195 North 1950 West (Conference Room #1015) SLC, Utah
March 10, 2016
1:30 p.m.

Board Members Present: Richard Codell, Danielle Endres, Marc Franc, Alan Matheson, Steve McIff, Shawn Milne, Brett Mickelson, Dennis Riding (Vice Chair), Vern Rogers, Shane Whitney and Dwayne Woolley (Chair)

Board Members Absent: Jeremy Hawk

Staff Members Present: Scott Anderson, Brent Everett, Sandra Allen, Therron Blatter, Ralph Bohn, Ryan Johnson, Arlene Lovato, Rusty Lundberg, Deborah Ng, Rick Page, Jerry Rogers, Elisa Smith, Matt Sullivan, Doug Taylor, and Otis Willoughby

Others Present: Tim Orton, Donna Sackett, Brent Stephens

I. Call to Order.

Dwayne Woolley (Chair) welcomed all in attendance and called the meeting to order at 1:30 p.m.

II. Approval of the meeting minutes for the January 14, 2016 Board meeting.

It was moved by Shawn Milne and seconded by Dennis Riding and UNANIMOUSLY CARRIED to approve the January 14, 2016 Board Meeting minutes.

III. Underground Storage Tanks Update.

Brent Everett, Director of the Division of Environmental Response and Remediation (DERR), informed the Board that the cash balance of the Petroleum Storage Tank (PST) Trust Fund at the end of January 2016 was \$16,142,833.00. The preliminary estimate for the cash balance of the PST Trust Fund for the end of February 2016 is \$16,667,613.00. The PST Trust Fund is managed on a cash balance basis to ensure sufficient coverage for known claims that have been reported. The balance fluctuates based on the number of claims received and the cost of claims paid. There were no questions or comments on the PST Trust Fund balance.

Mr. Everett reported on House Bill (HB) 385. This legislation pertains to air quality. However, because it impacts facilities that are regulated by the Underground Storage Tank Program, Mr. Everett wanted to bring it to the Board's attention. HB 385, sponsored by Representative Eliason, requires a deliverer of fuel to use secondary vapor containment during a fuel drop. If the secondary containment is not used, a fine could be imposed. HB 385 also provides that if a facility does not have the proper equipment to hook up to a secondary containment system, there would be no fine. Air quality rules are already in place regarding vapor recovery. This bill adds the authority for fining those who are not using the secondary containment system.

Dennis Riding asked if the bill had an enforcement mechanism. Mr. Everett explained that the legislation does not address enforcement.

IV. Administrative Rules.

A. Approval for filing a five-year review of Radiation Control Rule R313-26 (Board Action Item).

Rusty Lundberg, Deputy Director, Division of Waste Management and Radiation Control reviewed the filing of a five-year review for Rule R313-26, Generator Site Access Permit Requirements for Accessing Utah Radioactive Waste Disposal Facilities. Mr. Lundberg informed the Board that for the rule to continue, a Notice of Continuation (Five-Year Review) must be filed prior to the anniversary of the last five-year review.

The Utah Administrative Rulemaking Act (Utah Code Annotated §63G-3-305) requires state agencies to review each of their administrative rules within five years of the rule's original effective date or the last five-year review. The purpose of the review is to provide agencies with an opportunity to evaluate the rules to assess if the rules should be continued. In performing a five-year review, an agency may consider the need to amend or repeal rules that are archaic in form, are no longer used, are not based on existing statutory authority or are otherwise unnecessary.

R313-26 applies to facilities that use the disposal services of EnergySolutions through a permit that is issued by the Director. This rule identifies the requirements to obtain a permit.

Mr. Lundberg reiterated that a five-year review does not include any rule changes. A five-year review is only a mechanism for agencies to evaluate whether the rule is meeting its objective and should be continued. If a five-year review is not filed in the timeframe outlined, the rule could be automatically repealed (sunset of the rule).

It was moved by Steve McIff and seconded by Brett Mickelson and UNANIMOUSLY CARRIED to approve filing a five-year review for Radiation Control Rule R313-26.

B. Approval for filing a five-year review for Hazardous Waste Rules R315-15, R315-17, R315-101, R315-102 (Board Action Item).

Ralph Bohn, Planning and Technical Support Manager, Division of Waste Management and Radiation Control informed the Board that Rules R315-101 (Cleanup Action and Risk-Based Closure Standards) is up for a five-year review. As previously explained, if this rule is to continue, a Notice of Continuation (Five-Year Review) must be filed prior to the anniversary of the last five-year review.

Mr. Bohn further explained that because a five-year review of current rules can be filed at any time, the Director is proposing that Notices of Continuation (Five-Year Review) also be filed for Rules R315-15 (Standards for the Management of Used Oil), R315-17 (End of Life Automotive Mercury Switch Removal Standards) and R315-102 (Penalty Policy). By filing Notices of Continuation for all of these rules at this time, all of the hazardous waste rules will be on the same five-year review schedule. This will make administration of the five-year review process much easier and will ensure that reviews are not missed.

Mr. Bohn emphasized that a five-year review does not include any rule changes. It is only used as a mechanism for agencies to evaluate whether their rules are meeting their objective and should be

continued. If a rule requires any changes, it must go through the formal rulemaking process. Any changes to a rule, does not re-start the five year review period.

It was moved by Vern Rogers and seconded by Shawn Milne and UNANIMOUSLY CARRIED to approve filing five-year reviews for Hazardous Waste Rules R315-15, R315-17, R315-101 and R315-102.

C. Final adoption of R313-15, R313-19, and R313-24 to incorporate changes to the federal decommissioning planning regulations promulgated by the Nuclear Regulatory Commission on June 17, 2011 (76 FR 35512) (Board Action Item).

Rusty Lundberg reviewed the Director's request for final adoption of proposed changes to R313-15, Standards for Protection of Radiation, R313-19, Requirements of General Applicability to Licensing of Radioactive Material and R313-24, Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements.

In the December 10, 2015 Board meeting, the Board approved filing with the Division of Administrative Rules for publication in the Utah State Bulletin, the proposed changes to R313-15, R313-19 and R313-24. The rule changes incorporate the federal decommissioning planning regulations promulgated by the U.S. Nuclear Regulatory Commission (NRC) on June 17, 2011. The NRC issued the regulations to improve decommissioning planning in order to reduce the likelihood that any current operating facility will become a legacy site. The amended regulations require licensees to conduct their operations to minimize the introduction of residual radioactivity into the site, which includes the site's subsurface soil and groundwater.

Licensees also may be required to perform site surveys to determine whether residual radioactivity is present in subsurface areas and to keep records of these surveys with records important for decommissioning. The amended regulations require licensees to report additional details in their decommissioning cost estimate, eliminate the escrow account and line of credit as approved financial assurance mechanisms and modify other financial assurance requirements. Changes to Utah rules are required in order to maintain compatibility with NRC regulations as an Agreement State with the NRC. Under NRC's requirements, an Agreement State has three years from the effective date of a federal regulation to adopt a corresponding rule.

The proposed rule changes were published in the January 1, 2016 edition of the Utah State Bulletin initiating the public comment period which ended February 1, 2016. No comments were received.

It was moved by Dennis Riding and seconded by Shane Whitney and UNANIMOUSLY CARRIED to approve for final adoption the proposed changes to R313-15, R313-19, and R313-24 to incorporate changes to the federal decommissioning planning regulations promulgated by the Nuclear Regulatory Commission on June 17, 2011, as published in the January 1, 2016 Bulletin with an effective date of March 15, 2016.

D. Approval of a change in a proposed rule to R313-22-35 to incorporate comments made by the Nuclear Regulatory Commission (Board Action Item).

Rusty Lundberg reviewed an additional change made to R313-22-35, Financial Assurance and Recordkeeping for Decommissioning, based on a comment received in a letter from the U.S. Nuclear Regulatory Commission (NRC). (A copy of the NRC letter was provided in the March 2016 Board packet.)

In the December 10, 2015 Board meeting, the Board approved filing with the Division of Administrative Rules and publication in the Utah State Bulletin, proposed changes to R313-22, Specific Licenses, together with other proposed changes to R313-15, R313-19 and R313-24. Changes to these rules were required in order to maintain regulatory compatibility with the NRC by incorporating federal decommissioning planning regulations promulgated by the U.S. Nuclear Regulatory Commission (NRC) on June 17, 2011. The comment from the NRC only affects a paragraph in R313-22-35.

NRC requested the following change to paragraph R313-22-35(5)(a)(C):

(C) The volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination;

The Board is being asked to approve the filing of a Change in Proposed Rule (R313-22) with the Division of Administrative Rules with an effective date of May 9, 2016. The change in the proposed rule addresses NRC's requested change and maintains compatibility with the corresponding federal radioactive materials regulations.

Dennis Riding asked if the Change in Proposed Rule will go back out for a 30-day public comment period. Mr. Lundberg explained that these changes do not go through another 30-day formal public comment period, as DAR only requires a 30-day notice period prior to the rule becoming effective.

It was moved by Shane Whitney and seconded by Shawn Milne and UNANIMOUSLY CARRIED to approve the filing of a change to proposed Rule to R313-22-35 to incorporate comments made by the Nuclear Regulatory Commission with an effective date of May 9, 2016.

E. Approval to proceed with formal rulemaking and 30-day public comment period for proposed changes to Solid Waste Rule R315-310 and to adopt Solid Waste Rule R315-319 (Board Action Item).

Matt Sullivan, Environmental Scientist, Solid Waste Section, Division of Waste Management and Radiation Control, reviewed the proposed changes to R315-310, Permit Requirements for Solid Waste Facilities and adoption of R315-319, Coal Combustion Residuals Requirements. Mr. Sullivan provided a power-point presentation (a copy of the presentation is available with the meeting minutes.)

Mr. Sullivan gave a brief history regarding the proposed coal ash rule. In December 2008, a surface impoundment owned by the Tennessee Valley Authority had a serious breach at one of its coal ash storage impoundments and released 1.1 billion gallons of coal ash into the Clinch River. In response, EPA promulgated new rules to address the management of coal combustion residuals in landfills and surface impoundments. The federal rule was published in April of 2015 and became effective in October of 2015.

R315-319 is patterned after the new federal rules and specifies the minimum criteria for management of these wastes in landfills and surface impoundments, including the requirement to obtain a permit. The rule also adds language allowing continued operation of landfills that are in operation at the time the requirement for a permit becomes effective, provided an application is submitted within six months of the effective date of the rule.

Richard Codell asked if the State or EPA is going to require plants that have impoundments for coal ash be closed by a certain date. Ralph Bohn explained that plants do not need to close, but the federal rule requires that the impoundments be upgraded to a fairly high standard, which may force a number of plants to close. Many plants are moving to non-liquid disposal for their ash.

Mr. Codell asked if any of the plants are making dry wall board from scrubber residue. Mr. Bohn stated that some of it is used in this manner but in the west it's cheaper to use gypsum for wall board than scrubber residue so it's a question of economics. Mr. Codell asked about other uses of scrubber residue. Mr. Bohn explained it can be used in soil treatment to break up clay.

Dennis Riding asked about the environmental effects from these types of residues. Ralph Bohn stated that the main problem is groundwater contamination from nitrates and heavy metals. The EPA does have evidence of environmental damage from coal ash. The coal combustion residuals can also be a wind-blown problem.

Dwayne Woolley requested clarification on lined landfills, Class I/Class II landfills. Ralph Bohn explained that the rule requires liners, so Class I and Class II landfills will require liners if they want accept this type of waste. The plants that produce this waste will more than likely operate their own landfills as it is not economic for them to ship off-site.

Dennis Riding asked if impacted stakeholders were contacted for input regarding this rule. Ralph Bohn explained that the affected facilities were engaged in the rule development and have seen it twice already. Stakeholders may also provide additional comments during the 30-day public comment period.

March Franc asked that if the rule affects permitted solid waste facilities that may already accept this type of waste. Ralph Bohn stated that Class I, Class II, and Class V landfill facilities will be allowed to continue to accept this material under their current permit even if the cells are not lined. However, Class II landfills will likely not accept this waste because the volume will be overwhelming and would affect their status. The rule allows existing cells to continue operation unlined; any new cell would need to be lined.

It was moved by Marc Franc and seconded by Brett Mickelson and UNANIMOUSLY CARRIED to proceed with formal rulemaking and 30-day public comment period for proposed changes to Solid Waste Rule R315-310 and to adopt Solid Waste Rule R315-319.

V. Low Level Radioactive Waste Section.

A. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to dispose of one, 5-gallon bucket of spent Lithium-thionyl chloride batteries following macroencapsulation (Information Item Only).

Otis Willoughby, Environmental Scientist, Low Level Radioactive Waste Section, Division of Waste Management and Radiation Control, and Tim Orton, Representative for EnergySolutions, provided information on EnergySolutions' request for a variance from the Utah Hazardous Waste Management Rules. On January 22, 2016, EnergySolutions, LLC submitted a request for a site-specific treatment variance from the Utah Hazardous Waste Management Rules to dispose of High Concentration Arsenic Waste following macroencapsulation.

Tim Orton informed the Board that this type of variance request dealing with battery disposal was presented to the Board last year and since variances are only valid for one year, EnergySolutions is coming before the Board again to request a new variance to treat one 5-gallon bucket of spent lithium-thionyl chloride batteries at the Mixed Waste Facility.

The land disposal regulations require that batteries containing lithium be deactivated prior to land disposal. Macroencapsulation technology requires the waste to be classified as debris (which is a material exceeding 60 mm) before that technology can be used. EnergySolutions proposes to treat this 5-gallon bucket of batteries by macroencapsulation (even though the batteries are smaller than 60 mm) in the Mixed Waste Landfill Cell. This method will isolate the waste from precipitation and potential leaching. This request is based on the fact that, in order to deactivate the batteries, they would first need to be shredded. This method of treatment creates additional hazards to the employees without the assurance that the batteries, based on their size and shape, would be shredded. Final disposal of the waste will occur in the Mixed Waste Landfill Cell at the Mixed Waste Facility.

A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin on March 1, 2016. The comment period began March 1, 2016 and will end March 30, 2016. (If requested, a public meeting would be held but could potentially extend the public comment period). This is an informational item and will be brought before the Board for final adoption at the next Board meeting.

Dennis Riding asked if the facility anticipates receiving more of this waste stream. Mr. Orton did not anticipate the second shipment of this waste stream, but said the generator called and informed him that he had one more bucket of batteries, so he is unsure at this time.

Richard Codell asked if there is any radiation associated with these batteries. Mr. Orton explained that it is not likely but since the batteries came from a radiation area, they have to be handled accordingly. Mr. Codell stated he is familiar with the batteries in electronics and asked about the disposal of batteries not associated with radioactive equipment. Mr. Orton stated that if the batteries are from household use, they can be disposed in a municipal landfill. The only reason EnergySolutions is dealing with this waste stream is because the batteries might be radioactive as they are coming from a radioactive facility.

Vern Rogers asked if EnergySolutions noticed any impact to the macroencapsulation process from last year's treatment, due to the size, etc. Mr. Orton stated no, it does not change anything. These are such a minor portion of the macroencapsulation size (approximately one cubic foot).

B. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to dispose of High Concentration Arsenic Waste following macroencapsulation (Information Item Only).

Otis Willoughby and Tim Orton provided information on the variance request, dated January 18, 2016, from EnergySolutions LLC for a site-specific treatment variance from the Utah Hazardous Waste Management Rules to dispose of High Concentration Arsenic Waste following macroencapsulation.

Mr. Orton informed the Board that the Mixed Waste Facility has received approximately 105 cubic feet of Natural Gas Sweetener Filter Media. This material, made of clay pellets, retains hazardous waste codes for arsenic, cadmium and benzene. EnergySolutions proposes to treat this waste by macroencapsulation in the Mixed Waste Landfill Cell following chemical stabilization of the other contaminants. This request is based on the fact that the facility has attempted a variety of treatment formulas and has been unsuccessful in attaining treatment levels for the arsenic. The other contaminants have been treated below Land Disposal Restriction levels. The facility proposes to treat the final waste form with its in-cell macroencapsulation process. This method will isolate the waste from precipitation and potential leaching.

Mr. Orton stated that this type of waste would normally be treated at a hazardous waste landfill, but because of the radioactivity, it has to be treated otherwise. EnergySolutions proposes to treat the waste

to the standard of 5.0 mg/L for arsenic. Over the past six months, EnergySolutions has performed eight or nine treatability studies with various reagents and has been able to treat the waste to 129 mg/L for arsenic, where it has plateaued. Mr. Orton stated the Board is allowed to grant a variance if it is not physically possible to treat the waste to the level specified in the treatment standard. Therefore, the macroencapsulation process will be utilized and will isolate the waste from the environment so it will not leach out.

Shane Whitney asked about the volume of the waste stream. Mr. Orton stated that the facility has received approximately 105 cubic feet and does not expect to see any more of this type of waste. Mr. Orton also explained that this waste is well below the limits for radioactive disposal at the site.

Dennis Riding asked if the arsenic had become higher or started out at a high level. Mr. Orton clarified that the arsenic level started out high from the generator.

A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin on March 1, 2016. The comment period began March 1, 2016 and will end March 30, 2016. This is an informational item and will be brought before the Board for final adoption at the next Board meeting.

VI. Legislative Update.

Scott Anderson provided an update on bills that impact the Division of Waste Management and Radiation Control.

House Joint Resolution 13, sponsored by Representative McKell, directs the Division to study solid waste disposal fees and propose a “fair and equitable” solid waste fee structure. This bill has been sent to the House Rules Committee. It will likely be placed on an interim study list for further study.

House Joint Resolution 20, sponsored by Representative Perry gives Legislative Approval for construction and operation of a Class V solid waste landfill. Approval to operate a Class V solid waste landfill, which is a commercial facility, requires legislative approval, local government approval, a permit from the Director and the Governor’s approval. This is the first step in the process to obtain the necessary approvals. The landfill is located in Box Elder County.

This Joint Resolution has passed both the Senate and the House. The owners already have a permit for Class I landfill at this location, which could be amended to a Class V permit. However, because of the extensive requirements to obtain a Class V permit, it is being treated as a new application rather than amendment. The facility will also have to meet location standards, etc. Currently, the facility has not done any construction at the location.

House Bill 20, sponsored by Representative Perry, extends the sunset date for the Lead Acid Battery Disposal Act from 2016 to 2026. This bill has passed both the Senate and the House and has been sent on for enrollment/Governor’s signature.

House Bill 138, sponsored by Representative Perry, eliminates the requirement for the Division to report on electronic waste recycling to the House Natural Resources, Agriculture and Environment and Public Utilities Interim Committees. This bill has passed both the Senate and the House and has been sent on for enrollment/Governor’s signature.

House Bill 258, sponsored by Representative Oda, creates some exemptions from the definition of “solid waste” and “solid waste management facilities” for metal and metal recycling facilities and creates

standards for recyclers under certain conditions. This bill has passed both the Senate and the House and has been sent on for enrollment/Governor's signature. However, because these exemptions do not exist in Federal law, the Environmental Protection Agency has reviewed these exemptions and has made the determination that they conflict with Federal law. The EPA has determined that these exemptions make the State of Utah hazardous waste program less stringent than the federal government and raise state authorization (primacy) issues.

House Bill 347, sponsored by Representative Handy, creates authority for special service districts to acquire, construct and operate a resource recovery project. This bill is similar to Senate Bill 142, sponsored by Senator Weiler. During a committee meeting it was decided to move the relevant language in SB 142 to HB 347, because HB 347 opened the same part of the Code and was ahead of SB142. However, both bills have passed and have been sent for enrollment.

House Bill 476, sponsored by Representative Ipson, creates a waste paint management program. This bill provides for fees on the sale of paint at the distributor and retail level. The money collected would be utilized to fund a program for recycling and re-use of waste paint rather than disposal in a landfill. This bill has been sent back to the House Rules Committee and is not anticipated to pass.

Senate Bill 196, sponsored by Senator Iwamoto, creates incentives for recycling plastic bags, and imposes a 10 cent fee on certain plastic bags at point of sale. This bill is currently at the Senate Rules Committee and is not anticipated to pass.

Senate Bill 231, sponsored by Senator Adams. This bill is in response to legislation Senator Adams sponsored last year to address options for establishing financial assurance. The Nuclear Regulatory Commission (NRC) declared that legislation not compatible with the federal program, so this bill is designed to address those issues raised by the NRC. SB 231 provides approval authority for the Director regarding financial assurance from radioactive waste management facilities and authority to require financial assurance for "disturbed lands" at low level radioactive waste management facilities. The NRC still has some issues and this bill has been sent to the Senate Rules Committee and will require further modifications.

VII. Other Business.

- A. Misc. Information Items – None.
- B. Scheduling of next Board Meeting.

The next Board meeting is scheduled for 1:30 p.m. on April 14, 2016 at the Utah Department of Environmental Quality, 195 North 1950 West, SLC.

VIII. Adjourn.

The meeting adjourned at 2:24 p.m.